A paper sheet processing device (1) for processing paper sheets while carrying the paper sheets, comprising a device body (10), a carrier means (2) for carrying the paper sheets one by one, a carrier driving means for driving said carrier means, processing device parts (4A, 4B, 4C) which are installed in a carrying route (20) formed of the carrier means and which process the paper sheets, and processing driving means for driving the processing device parts. The device is characterized in that the processing device parts are installed detachably from the device body.